

Application Serial Number 10/532,254  
Response to Office Action  
Dated December 13, 2007

### **REMARKS / DISCUSSION OF ISSUES**

Claims 1, 2 and 4-7 are pending in the application. Unless indicated to the contrary, claims are amended for non-statutory reasons, such as to eliminate European-style phraseology.

#### **Rejections under 35 U.S.C. § 112, Second Paragraph**

Applicants respectfully submit that in view of the present amendment to claim 2, this rejection is moot.

#### **Rejections under 35 U.S.C. § 102**

Claims 1-7 were rejected under 35 U.S.C. § 102(b) as being anticipated by Liang, et al. (WO 01/54108A1). For at least the reasons that follow, Applicants submit that all claims are patentable over the applied art.

At the outset Applicants rely at least on the following standards with regard to proper rejections under 35 U.S.C. § 102. Notably, a proper rejection of a claim under 35 U.S.C. § 102 requires that a single prior art reference disclose each element of the claim. *See, e.g., W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303, 313 (Fed. Cir. 1983). Anticipation requires that each and every element of the claimed invention be disclosed in a single prior art reference. *See, e.g., In re Paulsen*, 30 F.3d 1475, 31 USPQ2d 1671 (Fed. Cir. 1994); *In re Spada*, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990). Alternatively, anticipation requires that each and every element of the claimed invention be embodied in a single prior art device or practice. *See, e.g., Minnesota Min. & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 24 USPQ2d 1321 (Fed. Cir. 1992). For anticipation, there must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. *See, e.g., Scripps Clinic & Res. Found. v. Genentech, Inc.*, 927 F.2d 1565, 18 USPQ2d 1001 (Fed. Cir. 1991).

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Claim 1, as amended recites:

*A display device with a plurality of pixels arranged in rows  $n$  and columns  $m$ , wherein the pixels of a row can be selected through control lines, and with a row driver circuit for activating the  $n$  rows by means of a row voltage and with a column driver circuit for controlling the  $m$  columns with a column voltage, which voltages correspond to the image data of the pixels of the selected row to be displayed, and wherein it is provided upon a transition from a selected row  $n$  to another row  $n+x$  that the row voltage is connected to an intermediate voltage level, and the row  $n+x$  is first connected to said intermediate voltage level and subsequently is charged up to the required row voltage wherein the charge of the selected row  $n$  can be stored in a capacitor at the intermediate voltage level.*

Claim 7 is drawn to a method and recites:

*A method of controlling a display device with pixels arranged in rows  $n$  and columns  $m$ , wherein row voltages are supplied to the rows via control lines so as to select said rows, and wherein column voltages are supplied to the columns  $m$  via data lines, and wherein the rows are consecutively selected, and in the case of a transition from a selected row  $n$  to another row  $n+1$  the charge applied to the selected row  $n$  is transferred to an intermediate voltage level, and the other row  $n+1$  is first connected to said intermediate voltage level and is subsequently charged up to the required control voltage, wherein the charge of the selected row  $n$  can be stored in a capacitor at the intermediate voltage level.*

In rejecting previous claim 3, the Office Action directed Applicants to page 4, lines 1-33 and page 5, lines 1-5 of *Liang* for the alleged disclosure the features of the claim. At page 4, beginning at line 20, the reference discloses that overlapping portions of intersecting electrodes form opposing plates of a capacitor, so that the intersecting portions of the two arrays of electrodes form a two-dimensional array of capacitors. The

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reference goes on to disclose that the optical transmission properties of a pixel are determined by the electrical potential applied to the opposing capacitor plates of the intersecting row electrode and column electrode that define a pixel. However, there is no description of charge storage of a selected row being in a capacitor; and that this occurs at the intermediate voltage.

Moreover, beginning at line 28 of page 4 and continuing to line 5 of page 5, transition of electrical potentials of rows and column electrodes are described. Specifically, the transitions from one potential to a second potential is described. At least one electrode undergoing a transition can be connected to a storage capacitor at an electrical potential between the two potentials. Thereby at least a portion of the charge originally on the electrode will be transferred to the storage capacitor. This transfer allows the electrode to be brought to a closer value of the target electrical potential to which it is transitioning.

While a transitioning sequence for an electrode is described and a charge transfer to a capacitor is described, there is no disclosure that *it is provided upon a transition from a selected row  $n$  to another row  $n+x$  that the row voltage is connected to an intermediate voltage level, and the row  $n+x$  is first connected to said intermediate voltage level and subsequently is charged up to the required row voltage wherein the charge of the selected row  $n$  can be stored in a capacitor at the intermediate voltage level*. Most notably, in *Liang*, the transitioning electrode is pulled by the capacitor, whereas in claim 1, the 'other row' is connected to the intermediate voltage and subsequently charged to the required row voltage. Moreover, according to claim 1, the charge of the transitioning row is stored in a capacitor at the intermediate voltage level.

Therefore, the applied art fails to disclose at least one feature of claim 1. By similar reasons, the reference also fails to disclose at least one feature of claim 7. Thus, claims 1 and 7 are patentable over the applied art. Moreover, claims 2 and 4-6 are patentable for at least the same reasons.

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**Conclusion**

In view the foregoing, applicant(s) respectfully request(s) that the Examiner withdraw the objection(s) and/or rejection(s) of record, allow all the pending claims, and find the application in condition for allowance.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies to charge payment or credit any overpayment to Deposit Account Number 50-0238 for any additional fees, including, but not limited to, the fees under 37 C.F.R. §1.16 or under 37 C.F.R. §1.17.

If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted on behalf of:

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Date: June 13, 2008

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